

TITLE V PERMIT TO OPERATE
For the
CITY OF PASO ROBLES LANDFILL

STAFF REPORT
Application Number 3080

December 12, 2001

I. Background

As a result of the federal Clean Act Amendments of 1990, the U.S. Environmental Protection Agency (EPA) has adopted emission control requirements for municipal solid waste landfills. Under 40CFR60, Subpart WWW, certain new and modified landfills must install landfill gas collection and control systems. Under 40CFR60, Subpart Cc, air pollution control authorities were required to either adopt a local control measure for existing landfills or implement a federally adopted plan. This District chose the latter option, which has led to the City of Paso Robles landfill becoming subject to 40CFR62, Subpart GGG. The central requirement of that regulation calls for existing landfills to install landfill gas collection and control equipment, if their non-methane organic compound (NMOC) emissions exceed 55 tons per year. To enforce that requirement, EPA requires that all subpart GGG sources obtain a federally-enforceable Title V permit. Consequently, the City of Paso Robles has applied for a Title V permit to operate their landfill, which is located east of the city along state Highway 46. This staff report is intended to assess the adequacy of that application and to explain the District's approach in composing the proposed Title V permit.

Application number 3080 was received on April 5, 2001, which satisfied the application deadline of April 6, 2001. A completeness evaluation was performed and the application was found incomplete on April 16, see attachment A. The District's primary concern was that the City and its contractor, Pacific Waste Services, did not appear to recognize that the landfill was subject to subpart GGG rather than subpart WWW. This issue was complicated by the fact that the landfill already has a landfill gas collection and control system of limited scope, which is similar to that required by subpart WWW, and the fact that EPA chose to heavily reference subpart WWW in subpart GGG.

The application was amended on May 18 and once again found incomplete on May 25 for pretty much the same reasons as the first time. A second amendment was received on July 24, and the application was still found to be incomplete on August 8. However, in this third incomplete finding, the District's focus shifted to the validity of the assumptions proposed to be used for the annual emissions calculation. A final amendment was received on September 10, in which the applicant agreed to redetermine the site-specific factors to be used for the emissions calculation. Application 3080 was subsequently deemed complete on September 13, 2001 (see attachment B).

The District's approach to the Title V program is to issue a combined permit that satisfies both the federal requirements under Rule 216, Federal Part 70 Permits, and the District's requirements under Rule 202, Permits. All federal, state, and District requirements associated with the emission of air contaminants are intended to be included in that permit. If there were documents that were not readily available to the public and were necessary to support the permit, they would be included as appendices. However, in this case, the District has decided that there are no such attachments needed. In making this decision, the District has taken the approach that all of the following documents are readily available to the public and, therefore, need not be included: the City of Paso Robles' permit application and design plans (which are available for review at the District's office), the Code of Federal Regulations, California's Code of Regulations and Health and Safety Code, the District's own Rules and Regulations (both those that are current and those that appear in the California State Implementation Plan), and all test methods.

The administrative requirements that apply to this new permit issuance are a 30-day public notice period and a 45-day EPA review period, which will run concurrently.

II. Compliance with Rule 216, Federal Part 70 Permits: A section-by-section evaluation of compliance with all pertinent requirements of this rule follows. Permit requirements only are listed. The actual wording of the rule is shown in normal font text. This document's comments are then shown in **bold text**, to evaluate compliance.

B. Applicability. **The City of Paso Robles' landfill operation is subject to the Federal Plan for Landfills under 40CFR62, Subpart GGG, in accordance with sections 62.14350 and 62.14352.a. Pertinent to the latter requirement, (1) the landfill began operation in 1970, which was prior to May 30, 1991, (2) has received waste since November 8, 1987, and (3) has the capacity to receive more waste. The City must obtain a Title V permit for the landfill under section 62.14352.e because their capacity exceeds 2.75 million tons (actual capacity is 4.6 million tons).**

E. Requirements - Application Contents

1. Required Information for a Part 70 Permit. A complete application for a Part 70 permit shall contain all the information necessary for the APCO to determine compliance with all applicable requirements. The information shall, to the extent possible, be submitted on standard application forms available from the District. **The application eventually contained all of the required information and was deemed complete, see attachment B to this evaluation. The District's standard application forms were used.**
5. Certification by Responsible Official. Any Part 70 permit application shall be certified by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **The application was certified to be true, accurate, and complete by Joe Deakin who is the City of Paso Robles' responsible official.**

F. Requirements - Permit Content

1. Each Part 70 permit shall conform to an EPA approved format and shall include the following elements: **The proposed permit format conforms to that submitted on May 16, 2001, as part of the District's revised Title V program.**
 - a. Conditions that will assure compliance with all applicable requirements, including conditions establishing emission limitations and standards for all applicable requirements. **All applicable requirements are included in the proposed permit.** Where any two or more applicable requirements are mutually exclusive, the more stringent shall be incorporated as a permit condition and the other(s) shall be referenced. **None of the applicable requirements were streamlined.**
 - b. The term of the Part 70 permit. **See condition III.A.8.**
 - c. Conditions establishing all applicable emissions monitoring and analysis procedures (**see condition III.C**), emissions test methods or continuous

monitoring equipment required under all applicable requirements (**see condition III.C**); and related recordkeeping and reporting requirements (**see condition section III.B**).

- 1) Where the applicable requirement does not require periodic testing or monitoring, conditions establishing periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit as reported pursuant to Subsection F.1.c.3. **Condition III.C.1.e requires biennial LFG sulfur content testing to ensure compliance with Condition I.B.1.**
 - i. Such monitoring requirements shall assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement. **The appropriate EPA test methods are specified.**
- 2) As necessary, requirements concerning the use, maintenance, and, where appropriate, installation of monitoring equipment or methods. **No monitoring equipment is required for the federally-enforceable conditions.**
- 3) Records of required monitoring information that include the following: **Not applicable. The monitoring to ensure compliance with the federally-enforceable requirements consists of an annual calculation and reporting of emissions. The record will consist of the report and its supporting data.**
 - i. The date, place as defined in the permit, and time of sampling or measurements;
 - ii. The date(s) analyses were performed;
 - iii. The company or entity that performed the analyses;
 - iv. The analytical techniques or methods used;
 - v. The results of such analyses; and
 - vi. The operating conditions as existing at the time of sampling or measurement.
- 4) All applicable records shall be maintained for a period of at least 5 years. **See condition III.B.**
- 5) All applicable reports shall be submitted every 6 months and shall be certified by a responsible official. **By regulation, the emissions report will be submitted annually, see condition III.B.6.b.2. All other federal requirement compliance reports will be submitted semi-annually, see condition III.B.6.a.**
 - i. All instances of deviations from permit requirements must be clearly identified. **See condition III.B.6.a.3.**
- e. A severability clause to ensure the continued validity of the various Part 70 permit requirements in the event of a challenge to any portions of the Part 70 permit. **See condition III.A.6.**
- f. A statement that the permittee must comply with all conditions of the Part 70 permit. **See condition III.A.2.a.**

- g. A statement that the need for a permittee to halt or reduce activity shall not be a defense in an enforcement action. **See condition III.A.2.c.**
- h. A statement that the Part 70 permit may be modified, revoked, reopened, and reissued, or terminated for cause. **See condition III.A.2.d.**
- i. A statement that the Part 70 permit does not convey any property rights of any sort, or any exclusive privilege. **See condition III.A.2.e.**
- j. A statement that the permittee shall furnish (information) to the permitting authority.... **See condition III.A.2.f.**
- k. A condition requiring the permittee pay fees due to the District consistent with all applicable fee schedules. **See condition III.A.9.**
- l. Applicable conditions for all reasonably anticipated operating scenarios identified by the source in its Part 70 permit application. **The City of Paso Robles did not request alternative operating scenarios in their application.**
- m. Applicable conditions for allowing trading under a voluntary emission cap accepted by the permittee to the extent that the applicable requirements provide for such trading without a case-by-case approval of each emissions trade. **The City of Paso Robles did not request an emission cap in their application.**
- n. Prompt reporting of deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and the corrective actions or preventive measures taken. **See conditions III.A.3 and III.B.4.b.**
- o. For any condition based on a federally-enforceable requirement, references that specify the origin and authority for each condition, and identify any difference in form as compared to such federally-enforceable requirement. **See convention A.1.**
- 2. Each Part 70 permit shall include the following compliance requirements:
 - a. A statement that representatives of the District shall be allowed access to the stationary source and all required records. **See condition III.A.5.**
 - b. A schedule of compliance consistent with Subsection L.2. **See condition III.A.4.**
 - c. Semiannual progress reports for any Hearing Board approved compliance schedule. **See condition III.B.6.a.4.**
 - d. A requirement that the permittee submit compliance certification pursuant to Subsection L.3. **See condition III.B.6.b.1.**
- 3. Federally-enforceable requirements. All conditions of the Part 70 permit shall be enforceable by the EPA and citizens under the CAA unless the conditions are specifically designated as not being federally-enforceable and, therefore, a District-only requirement. **See condition III.A.2.j.**
- G. Requirements - Operational Flexibility
 - 2. Alternative Operating Scenarios. The owner or operator of any stationary source required to obtain a Part 70 permit may submit a description of all reasonably anticipated operating scenarios for the stationary source as part of the Part 70 permit application. **The City of Paso Robles did not request alternative operating scenarios in their application.**
- H. Requirements - Timeframes For Applications, Review, And Reissuance
 - 1. Significant Part 70 Permit Actions

- a. Timely Submission of Applications. Any stationary source required to obtain a Part 70 permit pursuant to Section B shall submit an application for such permit in the following manner:
 - 2) For any stationary source that becomes subject to the requirement to obtain a Part 70 permit, pursuant to Subsections B.2.c or B.3 (**Section B.3 is applicable**) after the effective date of this Rule, and provided the source was being operated within San Luis Obispo County prior to the date on which such source becomes subject to the requirement to obtain a Part 70 permit, an application for a Part 70 permit shall be submitted to the District by no later than twelve (12) months after such source becomes subject to such requirement. **40CFR62, Subpart GGG, established April 6, 2001, as the deadline for application submittal. An application was received on April 5, 2001, but was not found complete until September 13, 2001.**
 - b. Completeness Determinations. The APCO shall provide written notice to an applicant regarding whether or not a Part 70 permit application is complete. **The City of Paso Robles was notified on September 13, 2001, that their application was complete.**
 - c. Action on Applications. The APCO shall take final action on each complete Part 70 permit application as follows:
 - 4) Except for applications listed pursuant to Subsections H.1.c.1 through 3, the APCO shall take final action on an application by no later than 18 months after the receipt of such complete application. **Final action is due to take place on or before December 31, 2001, which will be 3½ months after this application was deemed complete.**
5. EPA Objection. The APCO shall not issue a Part 70 permit if the EPA objects to the issuance of the Part 70 permit in writing within 45 calendar days of receipt by EPA of a copy of a complete application for a significant Part 70 permit action or minor Part 70 permit modification, the proposed Part 70 permit and all necessary supporting information or until EPA has notified the District that EPA will not object to such permit action, whichever occurs first. **A copy of the proposed permit was sent to EPA-IX and was received by them on October 26, 2001. The reference for condition III.C.1 was changed in response to an e-mailed request by EPA staff (see attachment D). When their comment period closed on December 12, 2001, EPA chose to not make any objections.**
- I. Requirements - Permit Term and Permit Reissuance
 1. All Part 70 permits shall be issued for a fixed term of 5 years from the date of issuance of the permit by the District. **See condition III.A.8.**
 - J. Requirements - Notification
 1. Public Notification
 - a. The APCO shall publish a notice, as specified in Subsection J.1.b, of any preliminary decision to grant a Part 70 permit, if such granting would constitute a significant Part 70 permit action. **A notice was published on October 31, 2001.**
 - b. Any notice of a preliminary decision required to be published pursuant to Subsection J.1.a shall:

- 1) Be published in at least one (1) newspaper of general circulation in San Luis Obispo County, by no later than ten (10) calendar days after such preliminary decision. **A notice was published on October 31, 2001, in the Telegram Tribune, which is a newspaper of general circulation in the District.**
 - 2) Be provided to all persons on the Part 70 permit action notification list. This list shall include any persons that request to be on such list. **No one has requested to be included on a Part 70 notification list.**
 - 3) Include the following:
 - i. Information that identifies the source, and the name and address of the source.
 - ii. A brief description of the activity or activities involved in the Part 70 permit action.
 - iii. A brief description of any change in emissions involved in any significant Part 70 permit modification. **See attachment F for text of public notice.**
 - 4) Include the location where the public may inspect the information required to be made available pursuant to Subsection J.1.c. **See Attachment F**
 - 5) Provide at least 30 calendar days from the date of publication for the public to submit written comments regarding such preliminary decision. **See Attachment F**
 - 6) Provide a brief description of comment procedures including procedures by which the public may request a public hearing, if a hearing has not been scheduled. The APCO shall provide notice of any public hearing scheduled pursuant to this subsection at least 30 calendar days prior to such hearing. **See Attachment F**
 - c. The APCO shall, by no later than the date of publication, make available for public inspection at the District office the information submitted by the applicant and the APCO's supporting analysis for any preliminary decision subject to the notification requirements of Subsection J.1.a. **The application and a copy of this evaluation, including the proposed permit, was be made available.**
 - d. The APCO shall maintain records of the those who comment and issues raised during the public participation process. **No comments were received.**
 - e. The APCO shall only consider comments regarding a preliminary decision to grant a Part 70 permit if the comments are germane to the applicable requirements implicated by the permit action in question. Comments will only be germane if they address whether the permit action in question is consistent with applicable requirements, requirements of this rule, or requirements of 40 CFR Part 70. In addition, comments that address a portion of a Part 70 permit that would not be affected by the permit action in question would not be germane. **No comments were received.**
- K. Requirements - Reopening of Permits
1. Reopening of Part 70 Permits for Cause. Each issued Part 70 permit shall include provisions specifying the conditions under which the permit will be reopened prior to the expiration of the permit. **See condition III.A.2.d.**

L. Requirements - Compliance Provisions

1. Permit Required and Application Shield. No stationary source required to obtain a Part 70 permit shall operate after the date it is required to submit a timely and complete permit application except in compliance with its Part 70 permit or under one of the following conditions:
 - a. When a timely and complete Part 70 permit application has been submitted, the stationary source may continue to operate until the Part 70 permit is either issued or denied. This provision does not allow the stationary source to operate in violation of any applicable requirement. **An application was received on April 5, 2001, but was not found complete until September 13, 2001.**
2. Compliance Plans. A compliance plan must be submitted with any Part 70 permit application. The compliance plan shall contain all of the following information: **See application attachment B.**
 - a. A description of the compliance status of the source with respect to all federally-enforceable requirements.
 - b. For federally-enforceable requirements with which the source complies, the plan must state that the source will continue to comply.
 - c. For federally-enforceable requirements that will become effective during the Part 70 permit term, the plan must state that the source will comply with such requirements in a timely manner.
 - 1) A detailed schedule shall be included for compliance with any federally-enforceable requirement that includes a series of actions.
3. Compliance Certification. All permittees and applicants must submit certification of compliance with all applicable requirements and all Part 70 permit conditions. A compliance certification shall be submitted with any Part 70 permit application and annually, on the anniversary date of the Part 70 permit, or on a more frequent schedule if required by an applicable requirement or permit condition. **The application contained a compliance certification and the annual requirement appears in condition III.B.6.b.1.**
4. Document Certification. Any Part 70 permit application and any document, including reports, schedule of compliance progress reports and compliance certifications, required by a Part 70 permit shall be certified by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **The application contained a document certification and the on-going requirements appear in conditions III.B.6.a&b.**
6. Permit Shield
 - a. Compliance with all of the conditions of a Part 70 permit shall be deemed compliance with any applicable requirements as of the date of issuance of the Part 70 permit, provided that the Part 70 permit application specifically requests such protection and one of the following conditions is satisfied:
 - 1) Such applicable requirements are included and specifically identified in the Part 70 permit, **No permit shield was requested, and no requirements were streamlined.**

III. Periodic Monitoring. If it is deemed necessary, Rule 216.F.1.a requires that the permit include periodic monitoring conditions, to ensure compliance with all applicable federal requirements. The primary applicable requirement, 40CFR62, Subpart GGG, already contains provisions for periodic monitoring (annual emission calculation), which are judged to adequately ensure compliance. This section of the evaluation will discuss applicable federal requirements that do not contain explicit monitoring.

1. SIP Rule 401, Visible Emissions (condition III.A.1.a). This rule limits emissions to 40% opacity. If warranted, periodic monitoring could be accomplished through visible emission evaluations by certified observers. The City of Paso Robles' flare is designed to be at least 98% efficient. Any visible emissions that might occur from the landfill gas (LFG) would result from incomplete combustion. The initial performance evaluation of this unit found zero visible emissions. Based on its design and proven performance, no visible emissions are expected to occur when operating this flare. Therefore, no additional periodic monitoring is proposed for the LFG combustion flare.

The potential for fugitive dust emissions exists in all areas where the natural soil surface has been disturbed. Fugitive dust is minimized at the landfill through watering, controlled use of vegetation, and basic operating practices designed to prevent nuisance dust conditions. Therefore, no additional periodic monitoring is proposed for fugitive dust emissions.

2. SIP Rule 111, Nuisance (condition III.A.1.b). This rule prohibits the causing of a public nuisance and stems from a similar regulation in the California Health and Safety Code. There is no corresponding federal requirement. While the rule currently appears in the SIP, it doesn't belong there. Reference EPA's analysis dated June 3, 1998, item 2.a clearly indicates that nuisance regulations should not be included in the SIP (see attachment D). SIP Rule 111 is intended to prevent nuisance situations and is not intended to control criteria air contaminants. Therefore, this rule will not be included as a federally enforceable requirement in this permit. Rather, its present day counterpart in District Rule 402 will be included as a District-only requirement.
3. SIP Rule 113, Particulate Matter (condition III.A.1.c). This rule limits particulate matter emissions to 0.3 gr/dscf for non-combustion emission points, 0.3 gr/dscf@3%O₂ for combustion related emission points, and to a sliding scale amount, in terms of lb/hr, depending on process rate. If warranted, periodic monitoring could be accomplished through stack sampling. The City of Paso Robles' flare is designed to operate with at least 98% efficiency and no significant particulate emission are anticipated. All other particulate matter sources at the landfill are fugitive in nature and this rule does not apply. Consequently, no additional periodic monitoring is proposed.
4. SIP Rule 114.1, Sulfur Dioxide (condition III.A.1.d.1). This rule limits emissions to 0.2% as sulfur dioxide. If warranted, periodic monitoring could be accomplished through continuous or periodic landfill gas sulfur content monitoring. As evidenced by the gas analysis performed for the flare's initial performance testing, zero hydrogen sulfide is present in the LFG. Consequently, no additional periodic monitoring is proposed.

5. SIP Rule 404.B, Sulfur Content of Fuels (condition III.A.1.d.2&3). This rule limits the sulfur content of gaseous fuels to 50 gr/100 dscf and liquid fuels to 0.5%. If warranted, periodic monitoring could be accomplished through continuous or periodic fuel sampling for sulfur content. The District's preconstruction review evaluation determined that the LFG should be considered a fuel, but its combustion was exempted from the District-only equivalent to SIP Rule 404.B because of a local allowance for control equipment that does not appear in the SIP version of the rule. However, the preconstruction review process found the 50 gr/100 dscf requirement to satisfy the District-only requirement for Reasonable Available Control Technology and a specific condition was applied to ensure compliance. In keeping with that precedence, SIP Rule 404.B will be considered to apply and a biennial "gap-filling" test for LFG sulfur content is proposed under Rule 216.F.1.c.1 as additional periodic monitoring (see condition III.C.1.e).
6. SIP Rule 406, Carbon Monoxide (condition III.A.1.e). This rule limits emissions to 2,000 ppm. If warranted, periodic monitoring could be accomplished through remote sensing or stack testing. The City of Paso Robles' flare has a District-only requirement of 0.2 lb/mmBtu that is much more stringent and has been source tested to emit <0.002 lb/mmBtu in 2000. Consequently, no additional periodic monitoring is proposed.
7. SIP Rule 407.H, Metal Surface Coating Thinners and Reducers (condition III.A.1.f). This rule prohibits thinning with photochemically reactive solvents. If warranted, periodic monitoring could be accomplished either through recordkeeping of the coatings and thinners used and their material data safety sheets (MSDS) or laboratory testing of each thinners mixed with metal part coatings. Condition III.B.1.i to the permit will require recordkeeping sufficient to show that non-photochemically reactive thinners and reducers are used by both the City of Paso Robles and their contractors for metal surface coatings. Note that condition III.A.2.1, which limits the applicability of the permit to the landfill site, is intended to satisfy any concerns that the City of Paso Robles might be liable for coatings applied off-site by contractors.
8. SIP Rule 407.H.3, Architectural Coatings (condition III.A.1.g). This rule prohibits the use of architectural coatings, sold in quart containers or larger, which contain photochemically reactive solvents. It also does not allow the thinning or reducing of those coatings with photochemically reactive solvents. If warranted, periodic monitoring would be same as under item 7 above. Condition III.B.1.j to the permit will require recordkeeping sufficient to show that non-photochemically reactive solvents, thinners, and reducers are used by both the City of Paso Robles and their contractors for architectural coatings.
9. SIP Rule 407.H.4, Disposal and Evaporation of Solvents (condition III.A.1.h). This rule prohibits the evaporation of any more than 1? gallons of photochemically reactive solvent during disposal. This type of emission might be characterized by allowing open paint cans to dry out prior to disposal so that the can and its contents do not have to be treated as a hazardous waste. If warranted, periodic monitoring could be accomplished through testing of waste solvent content before and after disposal. The City of Paso Robles should not allow any solvents to evaporate during disposal, whether those solvents are photochemically reactive or not. Condition III.A.1.h

prohibits any evaporation of solvents during disposal. Analysis of waste before and after disposal would be extremely expensive and is not warranted. Consequently, no periodic monitoring is proposed. Note that condition III.A.1.h references SIP Rule 407.H.4 for the limitation against evaporating one and one-half gallons per day of solvent and SIP Rule 205 for the further limitation that zero solvent may be evaporated.

10. SIP Rule 416, Degreasing Operations (condition III.A.1.i). This rule requires certain equipment and the use of good operating practices when using cold solvent degreasers. If warranted, periodic monitoring could be accomplished through independent observation of each degreasing operation. None of this equipment in use at the operation is significant enough to require a District permit and City personnel already adequately monitor any that is used. Consequently, no periodic monitoring is proposed.
11. SIP Rule 501.A, Open Burning (condition III.A.1.m). This rule prohibits the burning of outdoor open fires except for fire fighting training purposes. If warranted, periodic monitoring could be accomplished by independent observation of the operation as a whole. The City of Paso Robles has never been known or found to have lit open outdoor fires. Based on such a good track record of compliance, no periodic monitoring is proposed.

IV. Minor New Source Review.

In EPA's opinion, Rule 202 (minor new source review) authority to construct (ATC) conditions must be considered federally-enforceable when they are incorporated into a Title V permit. However, section 42301.12.a.3.A to the California Health and Safety Code (H&SC) constrains the District to only allow those conditions that are imposed by a federal requirement to be federally-enforceable in a Title V permit.

All of the conditions applied to the Paso Robles landfill under ATCs 2166 and 2965 were based on local requirements and were specifically not based on federal requirements. In a letter dated March 31, 1999, John Seitz of EPA (see attachment C) clearly indicated that one way to change a federally-enforceable requirement into a District-only enforceable requirement was to remove it from the underlying SIP-approved ATC. Therefore, to preclude the requirements from ATCs 2166 and 2965 from being considered federally-enforceable solely because they were included in an ATC, those ATCs were revised and reissued to delete all conditions except those that dealt with notification and temporary permit to operate matters. Consequently, all of the existing permit conditions for the landfill (PTO 70-3) will be incorporated as District-only conditions in the Title V permit, with the exception of the condition limiting the LFG sulfur content to 50 gr/100 dscf, as mentioned earlier in item III.5.

V. Specific Evaluation Notes

1. As introduced in the Background section earlier, this landfill is subject to 40CFR62, Subpart GGG, which is the federal compliance plan for municipal solid waste (MSW) landfills. That plan calls for an annual emissions calculation and, if emissions are estimated to exceed 55 tons of NMOC per year (tpy), the installation of gas collection and control equipment. However, the Paso Robles

landfill has already installed a landfill gas (LFG) collection and control system in response to the California Integrated Waste Management Board's (CIWMB's) finding that explosive gases were migrating underground beyond the landfill's property. However, the installed system is of limited scope and does not fully satisfy the requirements that subpart GGG may ultimately require. Also as mentioned earlier, subpart GGG's liberal referencing of 40CFR60, Subpart WWW, confuses which of the two regulations should be considered the applicable requirement.

The landfill is also subject to the District's landfill gas rule, Rule 426, because it contained 665,000 tons of waste in place in 1999; several requirements do not apply because volatile organic compound (VOC) emissions are estimated to be less than 15 tpy. However, the gas collection and control system was subject to the District's new source review process when it was installed, so portions of Rule 426 were required as Reasonable Available Control Technology - RACT (under Rule 204.A.1). A Rule 204.A.4 exemption from RACT for VOC emissions associated with the collection and control system was allowed, because that system was required to be installed by CIWMB; so requirements for VOC emission were applied under either Rule 426.E or F. The latter section requires a destruction efficiency of 98% or emissions of <30 ppmv and was interpreted to apply to any gas collected, regardless of whether or not that gas collection was required by the rule.

Rule 426.E addresses four basic areas: target volume, leaks, excavated waste, and condensate. The collection and control system only draws gas from about one-third of the landfill. In light of the fact that a good deal of the total gas generated at the landfill was not designed to be collected, the District's preconstruction review evaluation did not include a requirement prohibiting surface leaks, except in that area where collect was actually intended to occur. For that same reason, no requirements were applied to establish baseline conditions or establish target volumes. However, that review did apply the excavated waste and condensate requirements, because they were judged to be independent of the collection system's scope. The authority to apply these selected portions of section E requirements was based on the applicability of that section to the operation of any gas collection system.

The final interpretation of Rule 426 to be discussed here concerns subsection 426.E.8.a.3, which prohibits leaks along the gas transfer path. In the District's preconstruction review, all of the equipment that was designed to contain landfill gas was considered subject to that requirement, including wells, piping, valves, and the landfill surface above buried components.

These factors meant that the referencing for the proposed permit's conditions had to somehow interweave subparts GGG & WWW and Rules 204 & 426. The following approach was used.

- a. Any subpart WWW requirement that applied because it was referenced from subpart GGG was considered to be federally-enforceable and noted as, "40CFR60 as referenced by 40CFR62" (*e.g.*, [40CFR60.752.b as referenced by 40CFR62.14353.b]).
- b. Existing permit conditions related to VOC emission were considered to enforce District-only enforceable Rule 426 in the proposed Title V permit. This included:

- 1) Existing conditions 2 (III.D.1&I.A.5) and 5 (a-III.D.2, b-III.B.4.a.1&2, c-III.B.4.a.4), concerning VOC leak minimization;
 - 2) Existing conditions 6 (III.D.3) and 7 (III.D.4) concerning excavated waste and condensate respectively; and
 - 3) Existing condition 8 (I.A.1&2), concerning VOC reduction at the flare.
- c. Existing permit conditions related to non-VOC emissions were considered to enforce RACT and were referenced as being based on District-only enforceable Rule 204.A.1, even when the text of a requirement was drawn directly from Rule 426. This included:
- 1) LFG flow, oxygen concentrations, and flare temperature;
 - 2) measurements, recording, and testing; and
 - 3) compliance proposals included in the applications submitted for the collection and control system.
- d. Several new conditions were added (III.B.1.a-d), based on the applicability of Rule 426, that were overlooked in the original permit. These were referenced as being District-only enforceable and having been based on Rule 426.
2. The Paso Robles landfill is subject to 40CFR60-Subpart Cc, Emission Guidelines for Landfills. While most of that subpart deals with plan requirements for existing landfills, compliance section 60.36c.b contains an explicit requirement for any subject facility. If a landfill has a design capacity that is >2.7 million tons, and has received waste since 1987 or has the capacity to receive more waste, but has NMOC emissions of <55 tpy upon the effective date of the federal plan, then it must install controls within 30 months of the first annual report showing that emissions have exceeded 55 tpy. The Paso Robles landfill meets all of the above applicability criteria and has emissions of <55tpy. Consequently, the 30 month installation requirement is reflected in condition III.B.5.c to the proposed permit.

Note that the general provisions for 40CFR60 do not apply because this landfill is not considered a new or modified source. The applicability section 40CFR60.1.a reads, "...the provisions of this subpart (General Provisions) apply to ... any stationary source ..., the construction or modification of which is commenced after the date of publication in this part of any standard ... applicable to that facility." The District interprets this to say that a facility that is subject to an emission guideline, instead of a new source performance standard, is not subject to the general provisions.

3. Concerning the question of whether or not the NMOC emission calculations under subpart GGG should take into account the emission reductions at the flare. It is the conclusion of this evaluation that those emission reductions cannot be deducted from the emissions estimate without prior

approval of the administrator for EPA Region IX. The following logic is offered in support of that conclusion:

- 40CFR62.14355 requires that an annual NMOC generation report be prepared in accordance with 40CFR60.757.
- 60.757.b.1 requires that the NMOC calculation be in accordance with 60.754.a or b. That calculation is considered a “monitoring” requirement, because it is the method by which compliance with subpart GGG is shown.
- 62.14350.b.4 indicates that the authority to approve alternative monitoring methods was retained by the EPA administrator.
- Note that the caveat in 60.754.b that allows NMOC destruction to be taken into account only applies if a 60.755 compliant collection and control system is installed, which the Paso Robles landfill does not have.

Consequently, the emission reductions at the flare may not be reflected in the annual NMOC emissions estimate because (1) the EPA Administrator has not approved that alternative calculation approach and (2) Paso Robles doesn’t have a subpart WWW compliant collection and control system.

4. Timing of the NMOC Emission Rate Report. The Paso Robles Landfill became subject to 40CFR62, Subpart GGG, on January 7, 2000, and was required to submit an initial NMOC emission rate report by April 6, 2000, (62.14355.a.2). As referenced by subpart GGG, they are also required to update that report annually thereafter (60.757.b).

Paso Robles submitted their initial NMOC report on January 3, 2000, and estimated their emissions to be 8.25 tpy, which is well below the control trigger level of 55 tpy. The first annual resubmittal was not included with the permit application on April 5, 2001, which was probably for the best because the calculation methodology has since come into question (see the District’s letter of August 8, 2001, in attachment A). To allow Paso Robles the necessary lead time to perform testing required to determine site specific calculation factors and to ensure that the annual emission estimates are reported coincident with the District’s compliance determination, this evaluation proposes to reset the annual NMOC reporting date to July 31 each year (see condition III.B.6.b.2).

5. Condition III.A.2.b reads as follows:

"While temporarily operating at the City of Paso Robles landfill, any portable wood waste grinding equipment, trommel screen, or internal combustion engine, which provides the motive power for that grinding equipment or screen, shall comply with all applicable requirements of this permit."

This condition is phrased after the recommendation that appears in section B.1.b of ARB's portable equipment guidance document, dated September 30, 1998 (see attachment D). Portable sources often have internal combustion engines (ICEs) to either produce electrical power to drive motors on the equipment or to directly drive the equipment involved. Portable sources may be

brought onto the landfill on an infrequent and as-needed basis. The intent of condition III.A.2.b is to require that that equipment, and any associated engines, comply with any applicable requirement, both federally-enforceable and District-only, while at the landfill. Example requirements are opacity and nuisance. Note that District Rule 431, Stationary IC Engines, would not apply to any portable engines that were used for less than one year.

6. During the course of preparing this permit, several new or revised District-only requirements were identified as being necessary to ensure compliance with either the original conditions of permit 70-3 or other District Rules and Regulations. The following conditions have been included in the proposed permit under the authority granted in H&SC 42301.e.
 - a. Conditions I.A.1&2 were changed to reference non-methane organic compounds (NMOC) instead of volatile organic compounds (VOCs) to be consistent with the primary federal requirement to perform an annual NMOC emissions estimate. Analyses of Paso Robles' landfill gas have consistently found zero ethane content (see attachment D). That compound is the primary difference between VOC, which excludes ethane, and NMOC, which includes ethane, so its absence essentially equates the two terms.
 - b. As mentioned earlier, conditions III.B.1.a-d were added to reflect the applicable recordkeeping requirements of District Rule 426.H.1.
 - c. Condition III.B.4.a.2 was revised to include the clarification that the addition of a new well to correct a leak was considered an excavation. This was necessary to ensure that standard leak repair time period of three days would not apply to the installation of a new well.
 - d. Condition III.B.4.a.3 was added to ensure that any excavation to correct a leak would be subject to the APCO's review.
 - e. Condition III.B.6.a.2 was added to ensure that the District was made aware of any new wells. The existing permit's equipment description included the number of wells such that any change in that number constituted a modification, which required an application. This level of control was felt to be necessary during the collection and control equipment's initial operating period so that the District could ensure that the landfill complied with all applicable requirements. With that experience now gained, the District is willing to allow new wells to be installed without oversight, except in situations designed to repair leaks (see condition III.B.4.3). Consequently, the Title V permit equipment description does not include the number of wells and an authority to construct will not be required for additions. The District intends to track well addition activity, however, with this new proposed reporting condition.
 - f. Note (a) to condition III.C.1 explicitly restates a sulfur compound analysis method requirement that samples be analyzed within 24-hours. This reminder was deemed necessary due to a previous failure to adhere to that timetable at this source.

- g. Condition III.C.2 for an annual surface leak check was added to ensure compliance with the District-only condition III.D.2, which requires that there be no leaks from the surface of the landfill along the gas transfer path.
 - h. Condition III.D.5, which requires that the flare be in operation whenever LFG is being vented to it, was added as a good operating practice to ensure that uncontrolled LFG is not exhausted from the collection system.
7. 40CFR64, Compliance Assurance Monitoring (CAM), does not apply to the equipment and operations included in this permit because the landfill is not a major source of air contaminants (a major source has the potential to emit criteria emissions > 100 tpy). The applicability section, 64.2.a reads:
- “...this part shall apply to a pollutant-specific emissions unit at a major source that is required to obtain a part 70 or 71 permit...”
8. Permit Fees. The City of Paso Robles will be invoiced at the respective District hourly rate for the time it takes to issue this permit. The balance of the normal permit renewal fees that were paid in June 2001 will be used to satisfy the need for compliance determination fees under District Rule 302.F.5 for the Title V permit from its date of issuance through June 2002. Consequently, no additional compliance determination fees need to be assessed at this time.
9. Transition From Permit Renewal to Compliance Determination Cycle. The current permit is renewed annually in June. The proposed Title V permit would become effective January 1, 2002, and, under Rule 216.I.1, have an anniversary date of January 1, 2007. However, a determination of compliance in June of each year is preferred over January because the former month is after the local raining season when the landfill gas generation rate is at its annual peak and surface leaks are most likely to occur. Consequently, this evaluation intends for the annual compliance inspection to continue to occur in June, that compliance determination fees begin and continue to be assessed in June, that the biennial flare compliance testing continue to occur in June, and that the annual compliance certification and emissions rate report be submitted in July as a conclusion of these efforts.

V. Conclusion and Recommendation. In conclusion, the proposed Title V permit has been found to satisfy all of the requirements of District Rule 216 and the District's Title V permit program. Therefore, it is recommended that this permit be issued pursuant to those requirements.

David W. Dixon
Engineering Supervisor

Attachments: A - Completeness Correspondence
 B - Completeness Evaluation
 C - Minor New Source Review Correspondence
 D - Supporting Documentation

E - Current Permit to Operate
F - Public Notice Text

City of Paso Robles Landfill, Application 3080

Attachment A

Completeness Correspondence

City of Paso Robles Landfill, Application 3080

Attachment B

Completeness Evaluation

City of Paso Robles Landfill, Application 3080

Attachment C

**Minor New Source Review
Correspondence**

City of Paso Robles Landfill, Application 3080

Attachment D

Supporting Documentation

City of Paso Robles Landfill, Application 3080

Attachment E

Current Permit to Operate

City of Paso Robles Landfill, Application 3080

Attachment F

Public Notice Text